OIPE

RAW SEQUENCE LISTING DATE: 08/02/2001 PATENT APPLICATION: US/09/912,697 TIME: 14:29:45

Input Set : A:\MOR-0040.ST25.txt Output Set: N:\CRF3\08022001\1912697.raw ENTERED 3 <110> APPLICANT: Nicolaides, Nicholas C Sass, Philip M 5 Grasso, Luigi M 6 Kline, J Bradford 8 <120> TITLE OF INVENTION: METHODS FOR GENERATING ANTIBIOTIC RESISTANT MICROBES AND NOVEL ANTIBIOTICS 11 <130> FILE REFERENCE: MOR-0040 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/912,697 14 <141> CURRENT FILING DATE: 2001-07-25 16 <160> NUMBER OF SEQ ID NOS: 39 18 <170> SOFTWARE: PatentIn version 3.1 20 <210> SEQ ID NO: 1 21 <211> LENGTH: 3218 22 <212> TYPE: DNA 23 <213> ORGANISM: Saccharomyces cerevisiae 25 <400> SEQUENCE: 1 26 aaataggaat gtgatacctt ctattgcatg caaagatagt gtaggaggcg ctgctattgc 60 28 caaagacttt tgagaccgct tgctgtttca ttatagttga ggagttctcg aagacgagaa 120 30 attagcagtt ttcggtgttt agtaatcgcg ctagcatgct aggacaattt aactgcaaaa 180 32 ttttgatacg atagtgatag taaatggaag gtaaaaataa catagaccta tcaataagca 240 34 atgtctctca gaataaaagc acttgatgca tcagtggtta acaaaattgc tgcaggtgag 300 36 atcataatat cccccgtaaa tgctctcaaa gaaatgatgg agaattccat cgatgcgaat 360 38 gctacaatga ttgatattct agtcaaggaa ggaggaatta aggtacttca aataacagat 420 40 aacggatetg gaattaataa agcagacetg ccaatettat gtgagegatt cacgacgtee 480 42 aaattacaaa aattegaaga tttgagteag atteaaaegt atggatteeg aggagaaget 540 44 ttagccagta tctcacatgt ggcaagagtc acagtaacga caaaagttaa agaagacaga 600 46 tgtgcatgga gagtttcata tgcagaaggt aagatgttgg aaagccccaa acctgttgct 660 48 ggaaaagacg gtaccacgat cctagttgaa gacctttttt tcaatattcc ttctagatta 720 50 agggeettga ggteecataa tgatgaatae tetaaaatat tagatgttgt egggegatae 780 52 gccattcatt ccaaggacat tggcttttct tgtaaaaagt tcggagactc taattattct 840 54 ttatcagtta aaccttcata tacagtccag gataggatta ggactgtgtt caataaatct 900 56 gtggcttcga atttaattac ttttcatatc agcaaagtag aagatttaaa cctggaaagc 960 58 gttgatggaa aggtgtgtaa tttgaatttc atatccaaaa agtccatttc attaattttt 1020 60 ttcattaata atagactagt gacatgtgat cttctaagaa gagctttgaa caqcqtttac 1080 62 tocaattate tgccaaaggg etteagaeet tttatttatt tgggaattgt tatagateeg 1140 64 gcggctgttg atgttaacgt tcacccgaca aagagagagg ttcgtttcct gagccaagat 1200 66 gagatcatag agaaaatcgc caatcaattg cacgccgaat tatctgccat tgatacttca 1260 68 cgtactttca aggettette aattteaaca aacaageeag agteattgat accatttaat 1320 70 gacaccatag aaagtgatag gaataggaag agtctccgac aagcccaagt ggtagagaat 1380

72 tcatatacga cagccaatag tcaactaagg aaagcgaaaa gacaagagaa taaactagtc

74 agaatagatg cttcacaagc taaaattacg tcatttttat cctcaagtca acagttcaac

76 tttgaaggat cgtctacaaa gcgacaactg agtgaaccca aggtaacaaa tgtaagccac

78 teccaagagg cagaaaaget gacactaaat gaaagegaac aacegegtga tgecaataca

80 atcaatgata atgacttgaa ggatcaacct aagaagaaac aaaagttggg ggattataaa

82 gttccaagca ttgccgatga cgaaaagaat gcactcccga tttcaaaaga cgggtatatt

84 agagtaccta aggagcgagt taatgttaat cttacgagta tcaagaaatt gcgtgaaaaa

86 gtagatgatt cgatacatcg agaactaaca gacatttttg caaatttgaa ttacgttggg

1440

1500

1560

1620

1680

1740

1800

1860

RAW SEQUENCE LISTING DATE: 08/02/2001 TIME: 14:29:45 PATENT APPLICATION: US/09/912,697

Input Set : A:\MOR-0040.ST25.txt
Output Set: N:\CRF3\08022001\I912697.raw

																taata	1920
	_				_	_	_			_	-	_	_	_	_	caaac	1980
92	tttg	gtaag	ja t	aaac	ctaca	ga	gtac	aaat	gtg	tcag	atg .	atata	agtt	tt g	tata	atctc	2040
																aaata	2100
96	96 tgggacatga gcagtatgct aaatgagtac tattccatag aattggtgaa tgatggtcta														2160		
98															2220		
100	100 ccatctctgg tcaagttacc atttttata tatcgcctgg gtaaagaagt tgattgggag														2280		
102	gat	gaaca	ag	agtg	tctag	a t	ggta	tttta	a aga	agaga	attg	cat	tact	cta	tata	cctgat	2340
104	atg	gttcc	ga	aagt	cgata	c a	ctcg	atgca	a to	gttg	tcag	aaga	acga	aaa	agcc	cagttt	2400
106	ata	aatag	jaa	agga	acaca	t a	tcct	catta	a cta	agaa	cacg	ttc	tctt	ccc	ttgt	atcaaa	2460
108	cga	aggtt	cc	tggc	cccta	g a	caca	ttctc	aa	ggat	gtcg	tgga	aaat	agc ·	caac	cttcca	2520
110	gat	ctata	ıca	aagt	ttttg	a ga	aggto	gttaa	ct	ttaa	aacg	ttt	tggc	tgt a	aata	ccaaag	2580
	_			_	_	_		_			_			_		_	2640
112 tttttgttta tttcctgagt gtgattgtgt ttcatttgaa agtgtatgcc ctttccttta 114 acgattcatc cgcgagattt caaaggatat gaaatatggt tgcagttagg aaagtatgtc													2700				
																cgtatt	2760
																caaaga	2820
																aatatc	2880
						_										ctgtac	2940
		-	_		-					_			-			atctag	3000
																agttg	3060
		-	_				_	_	_	_		-	_			gcgcgt	3120
								_	_			_	_	_		gttatt	3180
			-		tgatt		_	_	_			000	LLLY	out ,	gguu	gecuee	3218
			-		_	u c	Julia	Juuce	· uc	<i>,</i>	au .						3210
135 <210> SEQ ID NO: 2																	
136 <211> LENGTH: 769																	
137 <212> TYPE: PRT 138 <213> ORGANISM: Saccharomyces cerevisiae																	
138 <213> ORGANISM: Saccharomyces cerevisiae 140 <400> SEQUENCE: 2																	
					Ile	T.vc	λla	Lon	λen	λla	Cor	Va 1	Wa 1	λen	Laze	Tlo	
143		261	шeu	лгу	5	цуз	пта	пец	тэр	10	261	Val	Val	กอน	15	116	
		λΊα	C117	Clu	Ile	Tla	Tlo	Cor	Dro		λαη	λla	LOU	Luc		Mot	
147	ALG	Ala	СТУ	20	116	116	116	261	25	Vai	ASII	АТа	цец	30	GIU	Mec	
	Mot	C1.,	7 an		Ile	A an	71 2	Nan		mb∞	Mo+	т1.	A an		T 011	375 l	
	Met	GIU	35	ser	iie.	ASP	Ата		Ата	THE	мес	тте	_	тте	ьеи	Val	
151	T	a 1		a1	T1.	T	17_ 1	40	01 =	-i1_	m 1	3	45	a1	a	01	
	гая		ста	GIY	Ile	гàг		Leu	GIII	TTE	Thr	_	ASI	GTĀ	ser	GIA	
155	-1 -	50	.	. 1 -		.	55	+1 -	.	G	01	60	Db.	m1	m1	Q	
		Asn	ьys	Ата	Asp		Pro	тте	Leu	Cys		Arg	Pne	Thr	Thr		
159		_				70	_	_	_		75			_	_ •	80	
	Lys	Leu	Gln	Lys	Phe	Glu	Asp	Leu	Ser		Ile	Gln	Thr	Tyr		Phe	
163										OA							
	_				85	_ _	_		_	90			_		95	-	
166	Arg	Gly	Glu		Leu .	Ala	Ser	Ile			Val	Ala	Arg		-	Val	
166 167				100	Leu				105	His				110	Thr		
166 167 170			Lys	100				Arg	105	His			Val	110	Thr		
166 167 170 171	Thr	Thr	Lys 115	100 Val	Leu .	Glu	Asp	Arg 120	105 Cys	His Ala	Trp	Arg	Val 125	110 Ser	Thr Tyr	Ala	
166 167 170 171 174	Thr	Thr Gly	Lys 115	100 Val	Leu	Glu	Asp Ser	Arg 120	105 Cys	His Ala	Trp	Arg Ala	Val 125	110 Ser	Thr Tyr	Ala	
166 167 170 171 174 175	Thr Glu	Thr Gly 130	Lys 115 Lys	100 Val Met	Leu Lys	Glu Glu	Asp Ser 135	Arg 120 Pro	105 Cys Lys	His Ala Pro	Trp Val	Arg Ala 140	Val 125 Gly	110 Ser Lys	Thr Tyr Asp	Ala Gly	
166 167 170 171 174 175 178	Thr Glu Thr	Thr Gly 130	Lys 115 Lys	100 Val Met	Leu Lys Val	Glu Glu Glu	Asp Ser 135	Arg 120 Pro	105 Cys Lys	His Ala Pro	Trp Val	Arg Ala 140	Val 125 Gly	110 Ser Lys	Thr Tyr Asp	Ala Gly	
166 167 170 171 174 175 178 179	Thr Glu Thr 145	Thr Gly 130 Thr	Lys 115 Lys Ile	100 Val Met Leu	Leu Lys Val	Glu Glu Glu 150	Asp Ser 135 Asp	Arg 120 Pro	105 Cys Lys Phe	His Ala Pro Phe	Trp Val Asn 155	Arg Ala 140 Ile	Val 125 Gly Pro	110 Ser Lys Ser	Thr Tyr Asp Arg	Ala Gly Leu 160	

RAW SEQUENCE LISTING DATE: 08/02/2001 PATENT APPLICATION: US/09/912,697 TIME: 14:29:45

Input Set : A:\MOR-0040.ST25.txt
Output Set: N:\CRF3\08022001\I912697.raw

102					165					170					175	
183	37- 1	01	3	m	165	т1.	77 i a		T 0	170	T 10	C1	Dha	Com	175	T
	vaı	GIY	Arg		Ата	ire	HIS	ser	Lys	ASP	тте	GIY	Pne		Cys	ьуѕ
187	_	-1	a 1	180			_	_	185	a .		- _		190		m1
	Lys	Pne	_	Asp	ser	Asn	Tyr		Leu	ser	vaı	ьys		Ser	Tyr	Thr
191	_		195					200		_	_	_	205	_ •	_	_
	Val		Asp	Arg	Ile	Arg		Val	Phe	Asn	Lys		Val	Ala	Ser	Asn
195		210					215					220				
		Ile	Thr	Phe	His		Ser	Lys	Val	Glu		Leu	Asn	Leu	Glu	
	225					230					235					240
202	Val	Asp	Gly	Lys	Val	Cys	Asn	Leu	Asn		Ile	Ser	Lys	Lys	Ser	Ile
203					245					250					255	
	Ser	Leu	Ile		Phe	Ile	Asn	Asn	Arg	Leu	Val	Thr	Cys		Leu	Leu
207				260					265					270		
210	Arg	Arg	Ala	Leu	Asn	Ser	Val	Tyr	Ser	Asn	Tyr	Leu		Lys	Gly	Phe
211			275					280					285			
214	Arg	Pro	Phe	Ile	Tyr	Leu	Gly	Ile	Val	Ile	Asp	Pro	Ala	Ala	Val	Asp
215		290					295	•				300				
218	Val	Asn	Val	His	Pro	Thr	Lys	Arg	Glu	Val	Arg	Phe	Leu	Ser	Gln	Asp
219	305					310					315					320
222	Glu	Ile	Ile	Glu	Lys	Ile	Ala	Asn	Gln	Leu	His	Ala	Glu	Leu	Ser	Ala
223					325					330					335	
226	Ile	Asp	Thr	Ser	Arg	Thr	Phe	Lys	Ala	Ser	Ser	Ile	Ser	Thr	Asn	Lys
227				340					345					350		
230	Pro	Glu	Ser	Leu	Ile	Pro	Phe	Asn	Asp	Thr	Ile	Glu	Ser	Asp	Arg	Asn
231			355					360					365			
234	Arg	Lys	Ser	Leu	Arg	Gln	Ala	Gln	Val	Val	Glu	Asn	Ser	Tyr	Thr	Thr
235		370					375					380				
238	Ala	Asn	Ser	Gln	Leu	Arg	Lys	Ala	Lys	Arg	Gln	Glu	Asn	Lys	Leu	Val
239	385					390					395					400
242	Arg	Ile	Asp	Ala	Ser	Gln	Ala	Lys	Ile	Thr	Ser	Phe	Leu	Ser	Ser	Ser
243					405					410			•		415	
246	Gln	Gln	Phe	Asn	Phe	Glu	Gly	Ser	Ser	Thr	Lys	Arg	Gln	Leu	Ser	Glu
247				420					425					430		
250	Pro	Lys	Val	Thr	Asn	Val	Ser	His	Ser	Gln	Glu	Ala	Glu	Lys	Leu	Thr
251			435					440					445			
254	Leu	Asn	Glu	Ser	Glu	Gln	${\tt Pro}$	Arg	Asp	Ala	Asn	Thr	Ile	Asn	Asp	Asn
255		450					455					460				
258	Asp	Leu	Lys	Asp	Gln	Pro	Lys	Lys	Lys	Gln	Lys	Leu	Gly	Asp	Tyr	Lys
259	465		_	_		470	_	_	_		475					480
262	Val	Pro	Ser	Ile	Ala	Asp	Asp	Glu	Lys	Asn	Ala	Leu	Pro	Ile	Ser	Lys
263					485					490					495	
266	Asp	Gly	Tyr	Ile	Arg	Val	Pro	Lys	Glu	Arg	Val	Asn	Val	Asn	Leu	Thr
267	_	_	_	500	_			_	505	_				510		
270	Ser	Ile	Lys	Lys	Leu	Arg	Glu	Lys	Val	Asp	Asp	Ser	Ile	His	Arg	Glu
271			515	-		-		520		-	-		525		-	
	Leu	Thr	Asp	Ile	Phe	Ala	Asn	Leu	Asn	Tyr	Val	Gly		Val	Asp	Glu
275		530	•				535			-		540			-	
	Glu	Arq	Arg	Leu	Ala	Ala	Ile	Gln	His	Asp	Leu	Lys	Leu	Phe	Leu	Ile
279		-				550				-	555	-				560

RAW SEQUENCE LISTING DATE: 08/02/2001 PATENT APPLICATION: US/09/912,697 TIME: 14:29:45

Input Set : A:\MOR-0040.ST25.txt

Output Set: N:\CRF3\08022001\I912697.raw

```
282 Asp Tyr Gly Ser Val Cys Tyr Glu Leu Phe Tyr Gln Ile Gly Leu Thr
283
                    565
                                         570
286 Asp Phe Ala Asn Phe Gly Lys Ile Asn Leu Gln Ser Thr Asn Val Ser
                                     585
287
                580
290 Asp Asp Ile Val Leu Tyr Asn Leu Leu Ser Glu Phe Asp Glu Leu Asn
                                 600
                                                     605
294 Asp Asp Ala Ser Lys Glu Lys Ile Ile Ser Lys Ile Trp Asp Met Ser
        610
                            615
                                                 620
298 Ser Met Leu Asn Glu Tyr Tyr Ser Ile Glu Leu Val Asn Asp Gly Leu
299 625
                        630
                                             635
302 Asp Asn Asp Leu Lys Ser Val Lys Leu Lys Ser Leu Pro Leu Leu Leu
                                        650
                    645
306 Lys Gly Tyr Ile Pro Ser Leu Val Lys Leu Pro Phe Phe Ile Tyr Arg
                660
                                     665
307
310 Leu Gly Lys Glu Val Asp Trp Glu Asp Glu Gln Glu Cys Leu Asp Gly
            675
                                 680
314 Ile Leu Arq Glu Ile Ala Leu Leu Tyr Ile Pro Asp Met Val Pro Lys
                            695
                                                 700
315
318 Val Asp Thr Leu Asp Ala Ser Leu Ser Glu Asp Glu Lys Ala Gln Phe
                        710
                                             715
322 Ile Asn Arg Lys Glu His Ile Ser Ser Leu Leu Glu His Val Leu Phe
                                         730
323
                    725
326 Pro Cys Ile Lys Arg Arg Phe Leu Ala Pro Arg His Ile Leu Lys Asp
                                     745
                740
330 Val Val Glu Ile Ala Asn Leu Pro Asp Leu Tyr Lys Val Phe Glu Arg
                                760
            755
331
334 Cys
338 <210> SEQ ID NO: 3
339 <211> LENGTH: 3056
340 <212> TYPE: DNA
341 <213> ORGANISM: Mus musculus
343 <400> SEQUENCE: 3
344 qaattccqqt qaaqqtcctq aagaatttcc agattcctga gtatcattgg aggagacaga
                                                                            60
                                                                          120
346 taacctgtcg tcaggtaacg atggtgtata tgcaacagaa atgggtgttc ctggagacgc
348 gtcttttccc gagagcggca ccgcaactct cccgcggtga ctgtgactgg aggagtcctg
                                                                          180
350 catccatgga gcaaaccgaa ggcgtgagta cagaatgtgc taaggccatc aagcctattg
                                                                           240
352 atgggaagtc agtccatcaa atttgttctg ggcaggtgat actcagttta agcaccgctg
                                                                           300
354 tgaaggagtt gatagaaaat agtgtagatg ctggtgctac tactattgat ctaaggctta
                                                                           360
356 aagactatgg ggtggacctc attgaagttt cagacaatgg atgtggggta gaagaagaaa
                                                                           420
358 actttgaagg tctagctctg aaacatcaca catctaagat tcaagagttt gccgacctca
                                                                           480
                                                                          540
360 cgcaggttga aactttcggc tttcgggggg aagetctgag ctctctgtgt gcactaagtg
                                                                          600
362 atgtcactat atctacctgc cacgggtctg caagcgttgg gactcgactg gtgtttgacc
364 ataatgggaa aatcacccag aaaactccct accccgacc taaaggaacc acagtcagtg
                                                                          660
                                                                          720
366 tgcagcactt attttataca ctacccgtgc gttacaaaga gtttcagagg aacattaaaa
                                                                          780
368 aggagtattc caaaatggtg caggtcttac aggcgtactg tatcatctca gcaggcgtcc
370 gtgtaagctg cactaatcag ctcggacagg ggaagcggca cgctgtggtg tgcacaagcg
                                                                          840
                                                                          900
372 gcacgtctgg catgaaggaa aatatcgggt ctgtgtttgg ccagaagcag ttgcaaagcc
                                                                          960
374 tcattccttt tgttcagctg ccccctagtg acgctgtgtg tgaagagtac ggcctgagca
                                                                         1020
376 cttcaggacg ccacaaaacc ttttctacgt ttcgggcttc atttcacagt gcacgcacgg
```

RAW SEQUENCE LISTING DATE: 08/02/2001 PATENT APPLICATION: US/09/912,697 TIME: 14:29:45

Input Set : A:\MOR-0040.ST25.txt

Output Set: N:\CRF3\08022001\I912697.raw

```
1080
378 cgccgggagg agtgcaacag acaggcagtt tttcttcatc aatcagaggc cctgtgaccc
                                                                         1140
380 agcaaaggtc tctaagcttg tcaatgaggt tttatcacat gtataaccgg catcagtacc
382 catttgtcgt ccttaacgtt tccgttgact cagaatgtgt ggatattaat gtaactccag
                                                                         1200
384 ataaaaggca aattctacta caagaagaga agctattgct ggccgtttta aagacctcct
                                                                         1260
386 tgataggaat gtttgacagt gatgcaaaca agcttaatgt caaccagcag ccactgctag
                                                                         1320
388 atgttqaaqq taacttagta aaqctqcata ctgcagaact agaaaagcct gtgccaggaa
                                                                         1380
390 agcaagataa ctctccttca ctgaagagca cagcagacga gaaaagggta gcatccatct
                                                                         1440
392 ccaggctgag agaggccttt tctcttcatc ctactaaaga gatcaagtct aggggtccag
                                                                         1500
                                                                         1560
394 agactgctga actgacacgg agttttccaa gtgagaaaag gggcgtgtta tcctcttatc
396 cttcagacgt catctcttac agaggcctcc gtggctcgca ggacaaattg gtgagtccca
                                                                        .1620
398 eggacageee tggtgaetgt atggacagag agaaaataga aaaagaetea gggeteagea
                                                                        1680
400 gcacctcagc tggctctgag gaagagttca gcaccccaga agtggccagt agctttagca
                                                                         1740
402 qtqactataa cqtqaqctcc ctaqaaqaca qaccttctca qqaaaccata aactqtqqtq
                                                                         1800
404 acctggactg ccgtcctcca ggtacaggac agtccttgaa gccagaagac catggatatc
                                                                         1860
406 aatqcaaagc tctacctcta gctcgtctgt cacccacaaa tgccaagcgc ttcaagacag
                                                                         1920
408 aggaaagacc ctcaaatgtc aacatttctc aaagattgcc tggtcctcag agcacctcag
                                                                         1980
410 caqctqaqqt cqatqtaqcc ataaaaatqa ataaqaqaat cqtqctcctc qaqttctctc
                                                                         2040
412 tgagttctct agctaagcga atgaagcagt tacagcacct aaaggcgcag aacaaacatg
                                                                         2100
414 aactgagtta cagaaaattt agggccaaga tttgccctgg agaaaaccaa gcagcagaag
                                                                         2160
416 atqaactcaq aaaaqaqatt aqtaaatcqa tqtttqcaqa qatqqaqatc ttqqqtcaqt
                                                                         2220
418 ttaacctggg atttatagta accaaactga aagaggacct cttcctggtg gaccagcatg
                                                                         2280
420 ctgcggatga gaagtacaac tttgagatgc tgcagcagca cacggtgctc caggcgcaga
                                                                         2340
422 ggctcatcac accccagact ctgaacttaa ctgctgtcaa tgaagctgta ctgatagaaa
                                                                         2400
424 atctggaaat attcagaaag aatggctttg actttgtcat tgatgaggat gctccagtca
                                                                         2460
426 ctgaaagggc taaattgatt tccttaccaa ctagtaaaaa ctggaccttt ggaccccaag
                                                                         2520
428 atatagatga actgatettt atgttaagtg acageeetgg ggteatgtge eggeeeteae
                                                                         2580
430 gagtcagaca gatgtttgct tccagagcct gtcggaagtc agtgatgatt ggaacggcgc
                                                                         2640
432 tcaatgcgag cgagatgaag aagctcatca cccacatggg tgagatggac cacccctgga
                                                                         2700
434 actgccccca cggcaggcca accatgaggc acgttgccaa tctggatgtc atctctcaga
                                                                         2760
436 actgacacac cccttgtagc atagagttta ttacagattg ttcggtttgc aaagagaagg
                                                                         2820
438 ttttaagtaa tctgattatc gttgtacaaa aattagcatg ctgctttaat gtactggatc
                                                                         2880
440 catttaaaag cagtgttaag gcaggcatga tggagtgttc ctctagctca gctacttggg
                                                                         2940
                                                                         3000
442 tgatccggtg ggagctcatg tgagcccagg actttgagac cactccgagc cacattcatg
                                                                         3056
444 agactcaatt caaggacaaa aaaaaaaaga tatttttgaa gccttttaaa aaaaaa
447 <210> SEO ID NO: 4
448 <211> LENGTH: 859
449 <212> TYPE: PRT
450 <213> ORGANISM: Mus musculus
452 <400> SEQUENCE: 4
454 Met Glu Gln Thr Glu Gly Val Ser Thr Glu Cys Ala Lys Ala Ile Lys
455 1
                    5
                                        10
458 Pro Ile Asp Gly Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Ile
459
                                    25
462 Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Ile Glu Asn Ser Val Asp
463
466 Ala Gly Ala Thr Thr Ile Asp Leu Arg Leu Lys Asp Tyr Gly Val Asp
                            55
470 Leu Ile Glu Val Ser Asp Asn Gly Cys Gly Val Glu Glu Asn Phe
471 65
                                            75
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 08/02/2001

PATENT APPLICATION: US/09/912,697

TIME: 14:29:46

Input Set : A:\MOR-0040.ST25.txt

Output Set: N:\CRF3\08022001\I912697.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:3166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27